DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 70.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-009694
Date Inspected: 07-Oct-2009

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Japan Steel Works

OSM Arrival Time: 700
OSM Departure Time: 1630
Location: Muroran, Japan

CWI Name: T. Imai

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Tower, Jacking, and Deviation Saddles

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Art Peterson was present during the times noted above for observations relative to the work being performed in Fabrication Shop #4 and the Foundry Shop at Japan Steel Works.

Fabrication Shop #4:

Final NDT Operation in-process on Saddle: Tower Saddle Segment T1-1

The QA Inspector observed Nikko Inspection Services (NIS) Quality Control (QC) Non-Destructive Testing (NDT) personnel Mr. N. Osawa (#340) and Mr. R. Kumagai (#132) performing the magnetic particle test (MPT) inspection by the (wet method) on tower saddle segment T1-1 on the final machined surface of the level (1) area as shown on the plans of the interior of the troughs Tower Saddle T1-1. The NIS QC NDT Inspectors verified the lifting force of their yokes and the sensitivity of their yokes as per ASTM E709 prior to the start of the MPT inspection. The QA Inspector also verified that the bath concentration of the non-fluorescent particles were between (1.2 and 2.4) mL per (100) mL as per ASTM E709 Section 20.6.3 and the manufacturer recommendations. The actual settling volume was recorded at (2.1) mL as measured using a centrifuge tube with a (1.5) mL stem and after allowing the particles to settle for approximately (30) minutes prior to taking the settling volume measurement. The QA Inspector observed that the MPT inspection performed by Mr. N. Osawa and Mr. R. Kumagai were in-process at the end of the QA Inspectors' shift.

Preparation in-process for Trial Assembly: West Deviation Saddle Segments on East Side

The QA Inspector observed that the JSW personnel positioned west deviation saddle segments W2-E1, W2-E2, and W2-E3 onto jacks in preparation to perform the trial assembly of the west deviation saddle segments. The trial

assembly survey will be performed using a 3D Laser system after the segments are bolted together to check for height and length dimensions, flatness between the faying surfaces , divider plate groove alignment between the segments, and the parallel wire strand (PWS) compartment widths as per the approved final machined drawings. The QA Inspector observed that the preparation for the trial assembly of west deviation saddle segments W2-E1, W2-E2, and W2-E3 were in-process at the end of the QA Inspectors' shift.

Foundry Shop:

Post Weld Heat Treatment Operation completed on Saddle: West Jacking Saddle

The QA Inspector observed that the post weld heat treatment (PWHT) stress relief operation has been completed on the west jacking saddle for the major and minor repair weld operation previously performed.

Unless otherwise noted in this report, all observations reported on this date appeared to be in general compliance with the applicable contract specifications.

Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy at (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Peterson,Art	Quality Assurance Inspector
Reviewed By:	Guest,Kittric	QA Reviewer